DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 19.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012170 Address: 333 Burma Road **Date Inspected:** 19-Feb-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1500 **OSM Departure Time:** 2330 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: T. Pasqualone & M. Johnson **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girders

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the project site and observed the following work performed by American Bridge/Fluor (AB/F) personnel at the E1/E2 and E2/E3 field splices:

- A). Assembly fit-up of E1 to E2 field splice.
- B). Initial bolting of E2 to E3 field splice.

The QAI observed the installation and fillet welding of the assembly gear fitting aids to align the bottom plates of Orthotropic Box Girders E1 to E2 field splice. The fillet welding was performed by American Bridge/Fluor personnel Rory Hogan, ID 3186. The QAI observed the Quality Control (QC) inspector Tom Pasqualone verifying the Direct Current Electrode Positive (DCEP) welding parameters and preheat temperatures which were noted as 135 DC amps and a minimum temperature of 70 degrees fahrenheit.

Later in the shift the QAI also observed the AB/F personnel performing the initial installation of the temporary bolts of the floor beams and the longitudinal structural tee stiffeners located at the E2 to E3 field splice side plate panels. It appeared the connections were brought into alignment by driving drift pins through the various plies of splice plates to bring the bolt holes in their proper alignment. The QAI also observed the Quality Control (QC) inspector Mike Johnson performing a visual observance regarding the alignment of the bolt holes at these connections.

WELDING INSPECTION REPORT

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QA Observation Summary

The QA inspector observed the Shielded Metal Arc Welding (SMAW) process of the field assembly gear fitting aids. The welding was performed utilizing the Welding Procedure Specification (WPS)

ABF-WPS-D15-F1200A-1 which was also used by the AB/F Quality Control (QC) inspector Tom Pasqualone during the monitoring of the welding parameters. The welding parameters and preheat temperatures were verified utilizing a Fluke 337 clamp meter for the electrical welding parameters and Tempilstik temperature indicators for measuring the preheat temperatures. The Lincoln 3.2 mm welding consumables, which was utilized during the welding, was also verified by Mr. Pasqualone and appeared to comply with the AWS Electrode Classification E7018. The QC inspector Mr. Pasqualone appeared to perform the visual examinations and monitoring of the welding as per the contract documents. The welding and inspection on this shift was not completed except as noted and appeared to be in general compliance with the contract documents.

See the two (2) digital photographs below of this report in regards to the work performed and observed on this date.





Summary of Conversations:

There were no pertinent conversations were discussed in regards to the project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer